Section 2:

Framework for Action

Existing State Efforts

Addressing obesity prevention and control can only be successful through a collaborative approach involving a wide range of partners and stakeholders. Fortunately, South Carolina is a state small enough that diverse groups recognize the benefit of working together, yet large enough to have many experts committed to improving the health of the state's citizens. Collaborative efforts to promote healthy nutrition and physical activity, through individual behavior approaches and policy and environmental initiatives have long been a part of South Carolina's history.

One example of this is the CDC funded Florence Heart to Heart Program (1986-1991), which was one of the first instances in the nation where a state health department addressed risk reduction through policy and environmental change in a single community.

In 1999, South Carolina prepared two comprehensive reports describing the burden of obesity and physical inactivity in the state. The "Report on the Impact of Obesity on Health in South Carolina" was prepared for the South Carolina Legislature as a result of Concurrent Resolution S.252. Findings identified the need for the state to allocate annual funding for obesity efforts, including implementing prevention and treatment programs, enhancing surveillance, and developing policy to bring about changes in obesity rates among the population. However, no state funding has been allocated for obesity initiatives. DHEC contracted with the University of South Carolina School of Public Health's Prevention Research Center (PRC) to develop *Good Health:* It's Your Move. Physical Activity in South Carolina. This report was prepared to assist professionals and community leaders in efforts to promote physically active lifestyles.

South Carolina Healthy Schools (SCHS) is a collaborative project of the State Department of Education (SDE) and DHEC. This program, funded by CDC's Division of Adolescent and School Health, has enhanced the development of coordinated school health programs in the state. These programs include a focus on the reduction of risk behaviors associated with physical inactivity, unhealthy eating, and obesity.

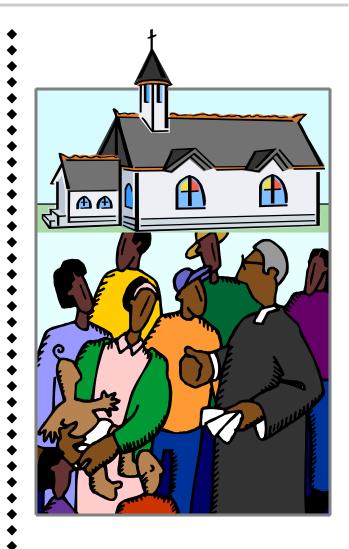


The South Carolina Governor's Council on Physical Fitness, established in 1972, provides a forum for communication, collaboration and, coordination of individuals and organizations with an interest in physical activity and healthy lifestyles. The Council promotes the health and well-being of South Carolinians of all ages by advancing levels of physical activity and fitness.

The South Carolina Coalition for Promoting Physical Activity (SCCPPA) is a non-profit organization working to unite the efforts of organizations, schools, businesses, and individuals concerned with promoting physical activity and improving health for all citizens of the state. SCCPPA plays a lead advocacy role for physical activity initiatives in South Carolina, working with decision makers to influence public policy at the state and community level. SCCPPA also sponsors a statewide physical activity conference each year to provide professional development and training opportunities.

"It is our goal to address health in the Seventh Episcopal District to work toward a healthier district utilizing the Health Commission and other components of the Episcopal district working together to get this done."

Bishop Preston Warren Williams, II Presiding Bishop of the Seventh Episcopal District African Methodist Episcopal Church



The Strategic Health Plan for the African Methodist Episcopal (AME) Church was released in January 2002. The statewide Seventh Episcopal District AME Church developed the plan in partnership with DHEC and the South Carolina Primary Health Care Association. These strategic planning efforts will be updated so that in conjunction with other activities and programs of the AME Church, will address quality of life for all along with eliminating racial and ethnic health disparities through prevention, awareness, and policy development.



The Office of Public Health Nutrition (OPHN) houses a food stamp nutrition education grant from USDA. The nutrition education campaign, "It's Your Health...Take Charge," is based on *social marketing* principles and designed to promote positive behavior changes in nutrition habits and physical activity patterns to impact obesity and other chronic diseases in the state.

Sumter County Active Lifestyles (SCAL) is a community-based coalition working to create and expand community environments and policy changes that support physical activity in Sumter County. SCAL came about as a result of a grant awarded to the DHEC Wateree Health District from the USC Prevention Research Center.

The extensive cadre of state agencies, organizations, community groups, academic professionals, and individuals sharing the same desire for a healthier South Carolina, along with existing health promotion efforts all contributed towards DHEC securing CDC funding for obesity prevention efforts in 2003. This Capacity **Building** grant was designed to establish infrastructure and develop a partnership for obesity prevention initiatives in the state. As a result, the Division of Obesity Prevention and Control (DOPC) was formed within the Bureau of Community Health and Chronic Disease Prevention to coordinate statewide obesity prevention efforts. DOPC program focus areas, as outlined by the CDC, include: increasing consumption of fruits and vegetables, increasing physical activity, promoting breastfeeding, reducing screen time, and balancing caloric intake and expenditure.

The Advisory Council outlined six overall goals for the South Carolina strategic framework:

- 1. Increase the percentage of South Carolinians who meet the current age specific recommendations for regular physical activity.
- 2. Increase the percentage of South Carolinians who consume at least five servings of fruits and vegetables a day.
- 3. Increase the percentage of South Carolina mothers who breastfeed for at least six months.
- 4. Increase the percentage of South Carolinians who achieve and maintain a healthy weight.
- 5. Decrease the burden of obesity and obesity-related chronic diseases.
- 6. Increase research projects in South Carolina related to obesity prevention and control.

Engaging Stakeholders

As a first step in building a statewide infrastructure, an internal DHEC committee was convened to identify partners for collaboration on obesity prevention efforts. These identified partners represented seven key sectors: community-based organizations, health care systems, voluntary health organizations, academic institutions, professional organizations, government/policy makers, and the media. An Advisory Council representing a composite of partners from these key sectors was selected. This group was charged with the task of guiding Work Groups in the development of a comprehensive state format to address obesity in South Carolina.

The Advisory Council initially met in March of 2004 to discuss tactics to address obesity prevention and control in the state. DOPC provided comprehensive resources and the most current data available on overweight and obesity issues to the Advisory Council. To guide the planning process and to identify a uniform focus, a vision and mission statements were developed.

Developing a Strategic Framework for South Carolina

In May of 2004, over 120 individuals and organizations attended a meeting in Columbia to launch statewide efforts to develop a strategic framework addressing obesity prevention and control. Participants self-selected into Work Groups: Business and Industry; Community and Faith-Based Organizations; Health Care Systems; and Schools. This broad-based, diverse group of South Carolinians formed the initial membership of the South Carolina Coalition for Obesity Prevention Efforts (SCCOPE).

Each Work Group was led by a member of the Advisory Council and staffed by a representative from the Bureau of Community Health and Chronic Disease Prevention within DHEC. Work Groups were provided with a collection of resources and examples of activities to create sustainable policy and environmental changes. The Work Groups met independently to develop objectives and strategies for the six goals and to expand and refine drafts.

Throughout this collaborative planning process, Work Group participants were encouraged to brainstorm, bring their diverse experience and expertise to the table, and introduce new and creative strategies to impact obesity in the state. As partners, Work Group participants were also charged to actively participate in the process and act as liaisons to other agencies, professional groups, and organizations to communicate the state planning efforts and solicit feedback and assistance in their focus areas.

A central premise used in the Work Group planning process was that recommendations developed for the state plan were to be data-driven, based on sound scientific evidence, grounded in the socio-ecologic model, and lead to policy and environmental changes. During Work Group meetings recurring themes revolved around the three milestones previously addressed: the importance of a comprehensive, coordinated approach; the necessity to enable communities to promote and support policy and environmental strategies; and ultimately, the improvement of the health of all citizens

Short-term objectives: 1-2 years

Medium-term objectives: 3-4 years

Long-term objectives: 5 plus years

of the state.
These core
principles
were used to
guide efforts
addressing
overweight
and obesity.

Because obesity is a complex

issue requiring a long-term commitment, short, medium, and long-term time frames were outlined so objectives would result in a comprehensive approach to obesity prevention and control efforts.

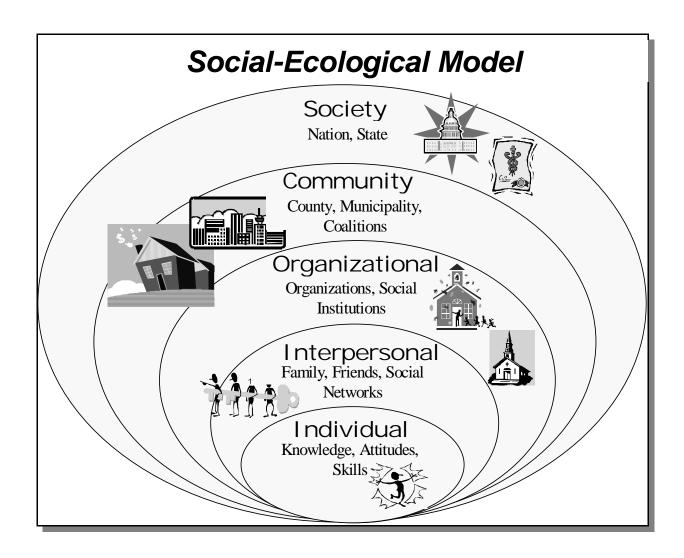


DOPC continued to provide on-going technical assistance to Work Groups through different types of communication and additional resources to facilitate the planning process. Once initial drafts were submitted, a team of DHEC evaluators and epidemiologists assessed each of the Work Group drafts. This process was used to ensure that the objectives met SMART (Specific, Measurable, Achievable, Realistic, Timebound) criteria, to identify gaps in current data and surveillance, and to begin an evaluation outline. The CDC State Plan Index was used as a guide to assist in determining the critical components for a comprehensive framework. Work Group participants provided feedback on draft revisions throughout fall 2004, with final drafts completed in December of 2004.

During this first phase of developing a statewide strategic framework for obesity, Work Group membership was typically limited to these initial participants. This helped to provide a more stable, committed planning group working on this specific activity. Having completed this initial planning stage, SCCOPE is open to a wide range of new partners to continue with the ongoing efforts to put the suggested frameworks into action.

Moving South Carolina Towards a Healthy Weight will require integrated strategies at multiple levels. This multi-level approach is based on the **social-ecologic model** (SEM), and that health promotion interventions are most effective when every element of a community is engaged. Given the magnitude of the obesity epidemic, traditional approaches solely targeting individuals alone cannot meet the challenges of obesity. While well-designed individual level approaches are essential, these efforts are most effective if they are matched with **environmental** and **policy initiatives** that support sustainable behavioral change across the community.

The SEM capitalizes on the premise that each element of a community is interconnected and change at one level can catalyze change in another.



The SEM provides a theoretical framework for obesity prevention and control efforts, showing that individuals are more likely to sustain healthy lifestyles when the environment in which they live supports those behaviors. South Carolina's comprehensive framework is built around three long-term desired milestones that can steer progress towards healthier citizens.

- Coordination and collaboration of different partners working together to share existing resources and to secure additional resources, as well as to share lessons learned, contribute to a more efficient process of addressing this chronic condition.
- Efforts focusing on the use of policy and environmental changes contribute toward sustainable support systems within different areas influencing daily lives. These can occur in the legislative arena, as well as at the community level, organizational level, and even family level.
- By using the SEM to guide interventions and activities, this complementary approach can lead to improving the health of those affected by the burden of obesity and related chronic diseases.



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In designing this strategic framework, a commitment was made to use the best evidence currently available to guide initial recommendations, and at the same time, develop a structure that is sufficiently flexible to incorporate new information. While a body of evidence is available to define the burden of obesity, research identifying the most effective measures to prevent obesity is far more limited. New studies, however, are beginning to point toward effective interventions. These promising practices are areas of emerging information that present potential for becoming evidence-based practices and are critical to expanding the knowledge base of what is or is not effective in addressing obesity and obesity-related chronic diseases.

Healthy People 2010 objectives, through various health indicators provide the measure by which to improve the health of Americans. Pertinent Healthy People 2010 objectives were used as the foundation from which to build the goals and objectives for this strategic framework (Appendix J).

The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity (2001) identified overweight and obesity as national public health priorities. The report outlined a broad range of activities for community organizations, health care, industry, schools, individuals, families, and government to take action to help address overweight and obesity. The Surgeon General's Call to Action was a key resource used to assist in the development of SC's framework.

Other notable resources used to guide recommendations included:

- * Guide to Community Preventive Services
- * Preventing Childhood Obesity: Health in the Balance
- * Resource Guide for Nutrition and Physical Activity Interventions to Prevent Obesity and Other Chronic Diseases

Promising Practices

Strategies or programs for which some studies in the scientific literature exist, but research is insufficient to determine effectiveness when repeated or used in different populations.

~

Best Practices

for which a
comprehensive review
of available literature
has determined
effectiveness in
addressing overweight
and obesity issues;
represents the strongest
available evidence.

- * HHS Blueprint for Action on Breastfeeding
- * Promising Practices in Chronic Disease Prevention and Control: A Public Health Framework for Action.

Although this document outlines a wide collection of activities at different time intervals and projects over a 10-year period, changes made in the short term can contribute towards reaching and achieving the long-term desired outcomes. Evaluation of these activities and corresponding changes is critical to further guide decisions as new data, research, and information become available. Comprehensive evaluation involves multiple methods and data sources.

The "CDC Framework for Program Evaluation in Public Health" will be used as a guiding document for determining process, impact, and outcome measures. Moving South Carolina Towards a Healthy Weight framework incorporates both process and impact evaluation methods. Program activities will be monitored continuously using process evaluation. Short-term impacts and program outputs will be measured through primary data collection. Finally, the attainment of intermediate and longterm projected outcomes will be monitored and assessed through statelevel surveillance systems.





Process Evaluation of the State Framework

Process evaluation methods will be used to document program implementation in order to monitor program fidelity and quality. Evaluation of each activity will be done in a timely manner. Additionally, a variety of process measures will be used as appropriate for each specific activity. Examples include, but are not limited to: establishment of partnerships, documentation of communications, partner/collaborator attendance and participation, implementation of new and existing programs, and the development of specific products and plans.

Short-Term Outcome Evaluation of the State Framework:

Short-term evaluation methods will be used to document if the effects of program activities are producing desired results. These indicators are critical in assessing if program efforts are moving toward meeting objectives. Short-term indicators are very specific and typically are not available from state-level surveillance data sources. Therefore, data will be collected to document education and advocacy efforts, the presence of and development of policies in various settings, and changes in environmental supports and capacity related to healthy weight.



CDC defines surveillance as "the ongoing systematic collection, analysis, and interpretation of outcome-specific data for use in the planning,

implementation, and evaluation of public health practice." Surveillance will be used to monitor obesity trends, as well as intermediate and long-term outcomes associated with the implementation efforts.

For the purposes of monitoring obesity and obesity-related issues in South Carolina, several surveillance data sources are available. These sources include BRFSS, YRBS, National Immunization Survey, and the SC

Infants and
Children (WIC)
Data System
reported through
the Pediatric
Nutrition
Surveillance
System
(PedNSS).

Women's



- The BRFSS will be used to monitor obesity prevalence, physical activity and nutrition behaviors, as well as weight management behaviors among adults in SC.
- The YRBS will be used to monitor overweight prevalence, physical activity and nutrition behaviors (including breakfast consumption), weight management behaviors, as well as television viewing among high school aged youth.
- WIC data from the PedNSS will be used to monitor birth weight and the prevalence of obesity among lowincome children from birth to 5 years old.
- National Immunization Survey data will be used to monitor breastfeeding prevalence among new mothers in the state.

Strategic Goals

1. Increase the percentage of South Carolinians who meet the current age specific recommendations for physical activity.

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Adults: Increase from 46.2% to 55.0%.

Adolescents: Increase from 66.4% to 75.0%.
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Qualifier: Regular physical activity is defined as at least 30 minutes of moderate activity on 5 or more days per week <u>or</u> 20 or more minutes of vigorous activity 3 or more days per week. Currently no state-representative physical activity surveillance data are available for children under 12 years of age.

2. Increase the percentage of South Carolinians who consume at least five servings of fruits and vegetables a day.

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Adults: Increase from 22.3% to 30.0%.

Adolescents: Increase from 17.6% to 30.0%.
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Qualifier: Currently no state-representative surveillance fruit and vegetable consumption data are available for children under 12 years of age.

3. Increase the percentage of South Carolina mothers who breastfeed for at least six months.

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Increase from <u>27.3%</u> to <u>35.0%</u>.
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Qualifier: The American Academy of Pediatrics recommends that babies are exclusively breast fed for the first 6 months of life. The Healthy People 2010 Target of 50% of new mothers breastfeeding at 6 months, does not specify exclusive breastfeeding. Given the low rate of breastfeeding at 6 months in SC, the primary goal is to increase the rate of any breastfeeding at 6 months, with a secondary goal of increasing the rate of exclusive breastfeeding at 6 months.

Baseline data for Goals can be found in Appendix D

4. Increase the percentage of South Carolinians who achieve and maintain a healthy weight.

Adults: Decrease the percentage of adults who are overweight or obese from 60.2% to 55.0%.

Adolescents: Decrease the percentage of adolescents who are overweight or at risk for overweight from <u>24.6%</u> to <u>20.0%</u>.

Qualifier: Currently no state-representative surveillance weight data are available for children under 12 years of age.

5. Decrease the burden of obesity and obesity-related chronic diseases in South Carolina.

Increase the general health ratings of South Carolinians.

Qualifier: A significantly higher percentage of South Carolinians at a healthy weight (compared to those who are obese) report excellent general health. If more residents achieve and maintain a healthy weight, statewide general health ratings should improve.

Decrease obesity-attributable medical expenditures.

Qualifier: In 2003, obesity-attributable medical expenditures in SC totaled \$1.06 billion.

6. Increase the number of population-based research projects in South Carolina related to obesity prevention and control.

Qualifier: Continued high-quality research in the areas of nutrition, physical activity as relates to obesity prevention and control among groups and communities is critical to continued expansion of the knowledge base.

Ongoing data collection will serve as the basis for yearly updates to the framework for action and the burden of obesity report. Data and reports will be disseminated to assist with raising public awareness and mobilizing

additional partners to address obesity in a comprehensive manner.

Although SC does not have a mandate for schools to collect BMI data, legislative efforts proposed during the 2005 legislative session have addressed the need for obtaining data on children and have included a line item to collect BMI-for-age for all children in the state.

Even with the various data sources available, a comprehensive obesity surveillance and evaluation system does not exist. For instance, South Carolina does not have nutrition, physical activity, and weight surveillance mechanisms in place for children in kindergarten through eighth grade. DOPC, along with partners, will develop a population-based obesity surveillance and evaluation system for SC that will provide essential data for decisionmaking. This system will include information from sources currently available, and will also monitor the burden of obesity and obesity-related conditions:

describe obesity as it relates to poor nutrition and physical inactivity; identify priority subgroups for interventions; assess the impact of policy and environmental supports; evaluate the economic impact of obesity; and evaluate progress toward achieving strategic goals.



Without this information (BMI-forage in children), determining the scope of the problem and determining policies are virtually impossible. It is also not possible, therefore, to measure the effectiveness of overweight control and reduction programs aimed at children and youth...

(Grantmakers in Health, February 2003)